

Claims

1. Remotely controllable switch unit for switching the mains inside an electrical installation, wherein the switch unit comprises:

5 - an electrically controllable switch;
 - a control circuit for controlling the switch; and
 - a receiver coupled to the control circuit for receiving wireless signals,
characterized in that the switch unit is adapted for mounting in a housing of a wall socket.

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2. Switch unit as claimed in claim 1, **characterized in that** the depth of the switch unit is smaller than 32 mm.

15 3. Switch unit as claimed in claim 1 or 2, **characterized in that** the switch unit is combined with a flush-mounted box, and that the maximum depth of the switch unit is at least 8 mm smaller than the maximum depth of the flush-mounted box.

20 4. Switch unit as claimed in claim 1, 2 or 3, **characterized in that** the switch unit is provided with an operating element of usual type for operating the switch.

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5. Switch unit as claimed in claim 1, 2 or 3, **characterized in that** the switch unit is provided with the female part of a wall socket.

6. Switch unit as claimed in any of the foregoing claims, **characterized in that** the switch unit is provided with an on/off switch.

25 7. Switch unit as claimed in claim 6, **characterized in that** the switch unit is provided with a dimmer.

30 8. Switch unit as claimed in claim 7, **characterized in that** the control circuit is adapted to sense the nature of a load connected to the female part of the wall socket and to block the dimming function when the load is not substantially formed by a resistance.

9. Switch unit as claimed in any of the foregoing claims, **characterized in that** the switch unit comprises a transmitter connected to the control circuit and that the switch unit is adapted to function as a junction in a network of transmitters/receivers.

5 10. Switch unit as claimed in any of the foregoing claims, **characterized by** an operating element arranged on the switch unit for operating at least the switch.

11. Switch unit as claimed in claim 10, **characterized by** a signal light source which comes on when the switch unit is switched on.

10 12. Switch unit as claimed in any of the foregoing claims, **characterized in that** the switch unit comprises at least one printed circuit board on which a number of components is placed, and that the printed circuit board extends parallel to the mounting surface of the housing.

15 13. Switch unit as claimed in claim 12, **characterized in that** at least one of the printed circuit boards extends over substantially the whole surface area of the housing, but is provided with a recess.

20 14. Switch unit as claimed in any of the foregoing claims, **characterized in that** the switch unit comprises a contact carrier which is manufactured from insulating material and on which contacts are arranged for the pins of the male plug and on which terminals are arranged for connecting the contacts to wires, and wherein at least one of the connections between contacts and terminals is interrupted.

25 15. Switch unit as claimed in claim 14, **characterized in that** the contact carrier is formed by a housing manufactured from plastic and having a substantially cylindrical part and a mounting flange.

30 16. Switch unit as claimed in any of the foregoing claims, **characterized in that** the switch unit comprises a power supply circuit which is adapted to connect a capacitor to the mains for only a short period of time after the zero passage of the mains.

17. Switch unit as claimed in any of the foregoing claims, **characterized in that** the switch unit comprises a relay for switching the connection between one of the contacts and one of the terminals.

5 18. Switch unit as claimed in any of the foregoing claims, **characterized in that** the switch unit is adapted to measure the power of the load connected to the switch unit.

10 19. Switch unit as claimed in claim 17, **characterized in that** the control circuit is adapted to transmit a signal representing the measured power to another element of the network.